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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/934,495	08/22/2001	Nobuo Mamada	3246/FLK/DIV of 2798/FLK	8056

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EXAMINER

GOFF II, JOHN L

ART UNIT	PAPER NUMBER
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1733

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DATE MAILED: 02/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

AS-4

Office Action Summary

Application No.

09/934,495

Applicant(s)

MAMADA, NOBUO

Examiner

John L. Goff

Art Unit

1733

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 August 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 22-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 22-26, 28-33 and 35-39 is/are rejected.
- 7) ☒ Claim(s) 27, 34 and 40 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☒ Certified copies of the priority documents have been received in Application No. 09/441,960.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Claim Objections

1. The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).

Misnumbered claims 1-19 have been renumbered 22-40, respectively. Claims 23, 30, and 36 are objected to because of the following informalities: In claims 23, 30, and 36 after "coupled" insert - - to - -. Appropriate correction is required.

3. Claims 31 and 37 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. The limitations disclosed by claims 31 and 37 are found in independent claims 28 and 35, respectively.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

5. Claims 22, 23, 25, and 26 are rejected under 35 U.S.C. 102(e) as anticipated by Blackadar et al. (U.S. Patent 6,336,365).

Blackadar et al. are directed to an accelerometer. Blackadar et al. teach a circuit board (710) comprising a front surface and a back surface and lands (704) formed on each surface at substantially plane-symmetrical positions, every two lands are connected to each other by a through hole (702) (See Figure 7). Blackadar et al. teach a capacitor (708) comprising a body having dielectric layers (706) and internal electrode layers (P1A, P2A) and a pair of terminal electrodes (714a, 714b) formed on two sides of the body, the dielectric layers and internal electrode layers are connected to the terminal electrodes in a parallel, alternate manner (See Figure 7 and Column 13, lines 19-22). Blackadar et al. teach mounting the capacitor on the lands of the front surface of the circuit board to form an accelerometer (Figure 7 and Column 13, lines 22-25). Blackadar et al. teach a second transducer may be coupled to the first capacitor by mounting the second transducer on the lands of the back surface of the circuit board (Figures 6A-6C and Column 11, lines 39-45 and Column 13, lines 27-31). Blackadar et al. teach transducers include multilayer capacitors (Column 12, lines 29-31).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 24, 28-33, and 35-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blackadar et al.

As noted above, Blackadar et al. are directed to an accelerometer. Blackadar et al. teach a circuit board (710) comprising a front surface and a back surface and lands (704) formed on each surface at substantially plane-symmetrical positions, every two lands are connected to each other by a through hole (702) (See Figure 7). Blackadar et al. teach a capacitor (708) comprising a body having dielectric layers (706) and internal electrode layers (P1A, P2A) and a pair of terminal electrodes (714a, 714b) formed on two sides of the body, the dielectric layers and internal electrode layers are connected to the terminal electrodes in a parallel, alternate manner (See Figure 7 and Column 13, lines 19-22). Blackadar et al. teach mounting the capacitor on the lands of the front surface of the circuit board to form an accelerometer (Figure 7 and Column 13, lines 22-25). Blackadar et al. teach a second transducer may be coupled to the first capacitor by mounting the capacitor on the lands of the back surface of the circuit board (Figures 6A-6C and Column 11, lines 39-45 and Column 13, lines 27-31). Blackadar et al. teach transducers include multilayer capacitors (Column 12, lines 29-31).

Regarding claims 24, 28, 31, 35, and 36, one of ordinary skill in the art would have readily appreciated mounting identical multilayer capacitors to the lands of the back surface and the front surface of the circuit board as only the expected results would be achieved.

Regarding claims 28 and 35, one of ordinary skill in the art would have readily appreciated identical voltages applied to the multilayer capacitors because the capacitors are coupled to each other by a through hole.

Allowable Subject Matter

8. Claims 27, 34, and 40 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. The following is a statement of reasons for the indication of allowable subject matter:

The prior art of record fails to teach or suggest a method for mounting a plurality of multilayer ceramic capacitors on a circuit board wherein identical pairs of the capacitors are disposed on opposite sides of the circuit board in plane-symmetrical position to each other with the capacitors having frequencies varying in an audible frequency band.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **John L. Goff** whose telephone number is **703-305-7481**. The examiner can normally be reached on M-Th (8 - 5) and alternate Fridays.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Ball can be reached on 703-308-2058. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

John L. Goff

John L. Goff
January 22, 2003

Michael W. Ball
Michael W. Ball
Supervisory Patent Examiner
Technology Center 1700